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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/804,764	03/19/2004	Mark Johnsgard	PA2704US	7692
22830	7590	12/11/2007		
CARR & FERRELL LLP 2200 GENG ROAD PALO ALTO, CA 94303			EXAMINER WU, IVES J	
			ART UNIT	PAPER NUMBER
			1797	
			MAIL DATE	DELIVERY MODE
			12/11/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/804,764

Applicant(s)

JOHNSGARD ET AL.

Examiner

Ives Wu

Art Unit

1797

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 and 25-27 is/are rejected.
- 7) ☒ Claim(s) 24 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

(1). Applicants' Remarks filed on 10/15/2007 has been received.

However, the rejections of claims 1-7, 15-23 and 26-27 in prior Office Action dated 07/12/2007 are sustained and a new ground of rejections for claims 8, 9-14 and 24-25 is presented together in the following.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

(2). **Claims 1-7, 15-23 and 26-27** are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnsgard (US04986838) in view of Han (US06090208A) for the same rationale recited in prior Office Action dated 07/12/2007..

(3). **Claims 8, 10-14 and 25** are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnsgard (US04986838) in view of Han (US06090208A), further in view of Lane et al (US05846275).

As to inlet manifold including a plunger for clearing the scrubber interface device in **claims 8 and 25**, Johnsgard, Han **do not teach** the use of plunger as claimed.

However, Lane et al (US05846275A) **teach** plunger mechanisms or other solids removal means (Col. 1, line 53-53).

The advantage of use plunger device is for cleaning out clogging problems (Col. 1, line 51), scraper or plunger devices for cleaning fluid treatment systems (Col. 9, line 23-27).

Therefore, it would have been obvious at time of the invention to install a plunger of Lane et al in the inlet system of Johnsgard in order to obtain the above-cited advantage.

As to insulated insert portion in the scrubber interface device in **claim 10**, the disclosure of Johnsgard, Han is incorporated herein by reference, the most subject matter as currently claimed, has been recited in applicants' claim 4, and has been discussed therein.

As to insulated portion having a minimum diameter for providing fluid communication to the inlet manifold and plunger head having a maximum diameter less than the minimum

diameter of insulated insert portion in **claim 10**, it would have been obvious to one of ordinary skills in the art at time of invention to have minimum diameter for the insulated insert portion in order to efficiently optimize the performance of scrubber inlet system for the determined operational conditions. "Where patentability is said to be based upon particular chosen dimensions or upon another variable recited in a claim, the applicant must show that the chosen dimension are critical". *In re Woodruff* 16 USPQ2d 1934 (Fed. Cir. 1990). It also would be obvious that plunger head has a maximum diameter less than minimum diameter of insulated insert portion in order to clear most clogs on the wall of insulated insert portion.

As to tapered portion in insulated insert portion in **claim 11**, it would be obvious for changes in shapes, but does not affect functions. *In re Dailey*, 357 F.2d 669, 149 USPQ47 (CCPA 1966).

As to recess portion to retract the plunger when it is not used in **claim 12**, it would be obvious to have a recess portion to accommodate the plunger in the inlet system of Johnsgard in order to integrate the function of plunger well with the rest of the system.

As to the recess portion having a heated gas inlet in **claim 13**, to distribute the stream of heated gas from the heated gas inlet in **claim 14**, it would be obvious to have heated gas inlet in the recess portion to distribute the heated stream because rearrangement of parts renders obvious. *In re Kuhle*, 526 F.2d 553, 188 USPQ 7 (CCPA 1975).

(4). **Claim 9** is rejected under 35 U.S.C. 103(a) as being unpatentable over Johnsgard (US04986838) in view of Han (US06090208A), further in view of Lane et al (US05846275) and Boring (US05878922A).

As to plunger including a perforated plunger head to allow effluent gas stream to flow through the scrubber interface device whenever the plunger head is disposed therein in claim 9,

Lane et al do not teach the perforated plunger head as claimed.

However, Boring (US05878922A) teaches self venting plunger including openings and forming air passage (Abstract, line 1-2).

The advantage of opening means in the plunger head is to compromise between extending shelf life and full evacuation of entrapped air (Col. 1, line 30-34).

Therefore, it would have been obvious at time of the invention to use a self-venting plunger of Boring for the plunger of Lane et al in the inlet system of Johnsgard in order to attain the above-cited advantage.

Allowable Subject Matter

(5). **Claim 24** is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

(6). Applicant's arguments filed on 10/15/2007 have been fully considered but they are not persuasive. Applicants address that the prior art Johnsgard (US04986838) does not disclose a inlet manifold, only teaches an inlet pipe 18, not equate with the inlet manifold of instant claim 1 (page 8-9, Remarks of 10/15/2007). Although it is recognized that Johnsgard (US04986838) does not teach an inlet manifold, however, when the inlet pipe including a hot gas input will form a Johnsgard's (US04986838) manifold. One can not show nonobviousness by attacking references individually where the rejections are based on combinations of references. *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Applicant's arguments with respect to claims 8-14 and 25 have been considered but are moot in view of the new ground(s). Although Lane et al provides specific reasons why one of ordinary skill in the art would not employ a plunger in precisely the type of application claimed herein (page 9, Remarks of 10/15/2007), negative teaching still means known in the prior art.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ives Wu whose telephone number is 571-272-4245. The examiner can normally be reached on 8:00 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on 571-272-1166. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Examiner: Ives Wu

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Date: December 6, 2007

DUANE SMITH
PRIMARY EXAMINER

[Signature]
12-7-07